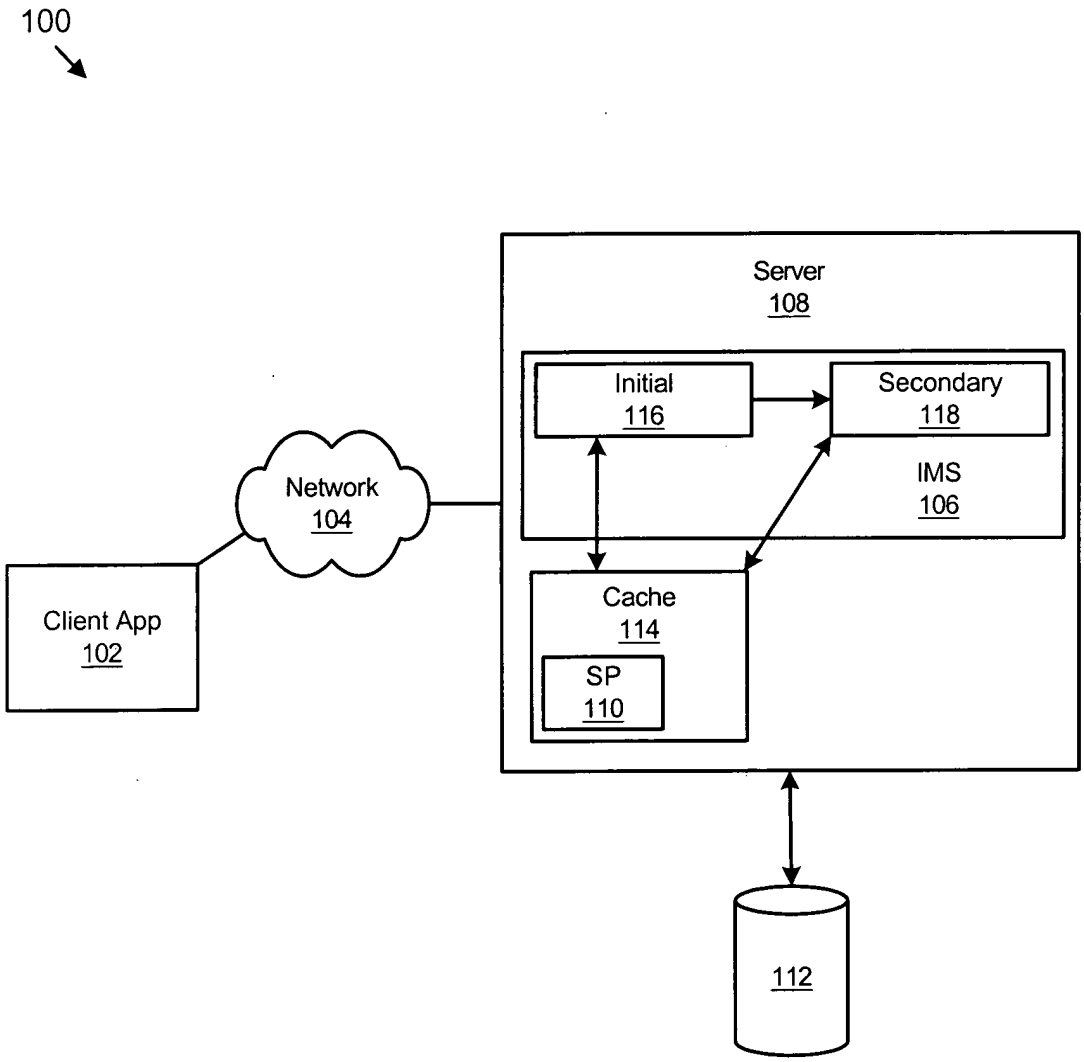

Fig. 1
(Prior Art)

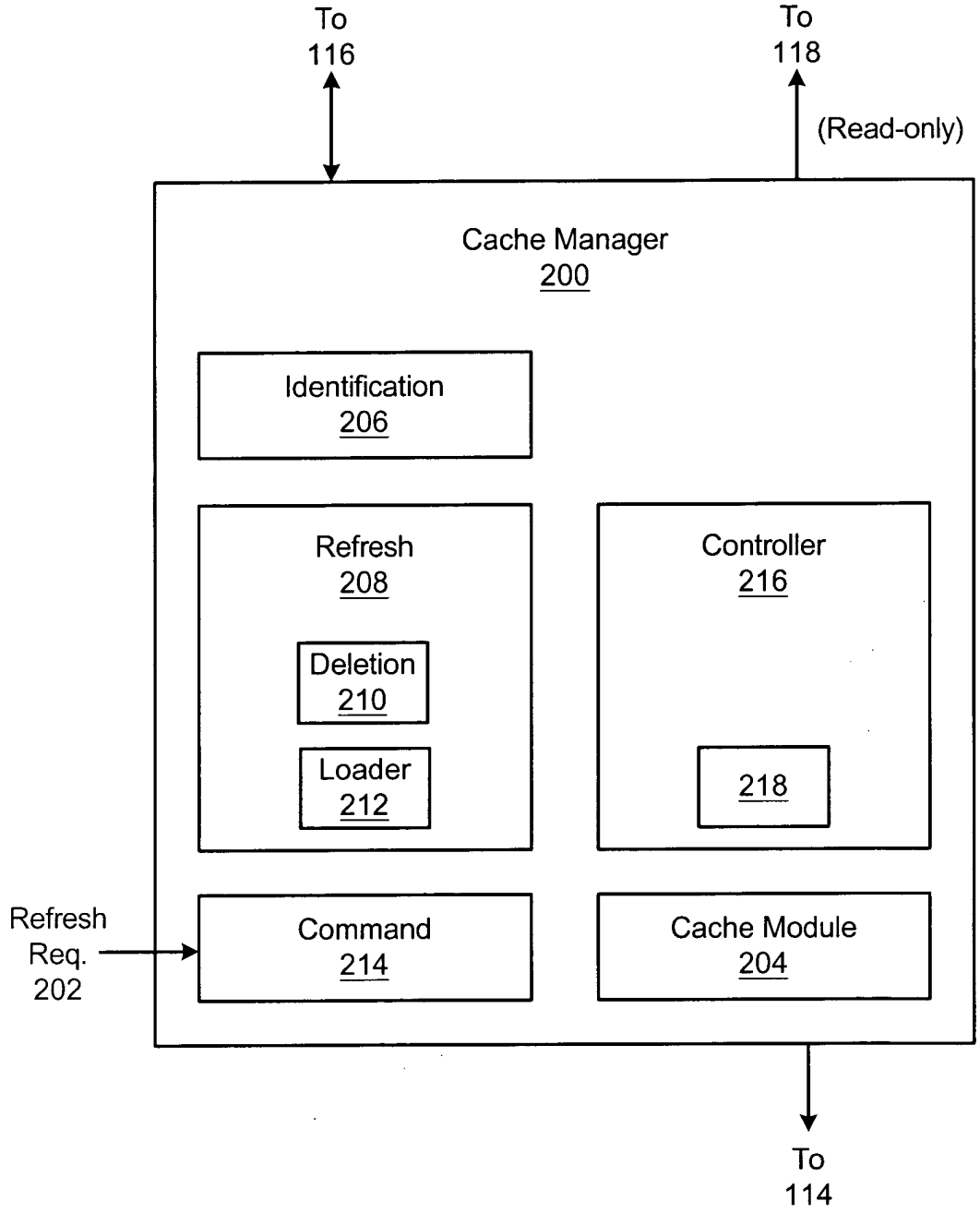
To
116
To
118
(Read-only)
Cache Manager
200
Identification
206
Refresh
208
Deletion
210
Loader
212
Controller
216
218
Refresh
Req.
202
Command
214
Cache Module
204
To
114

Fig. 2

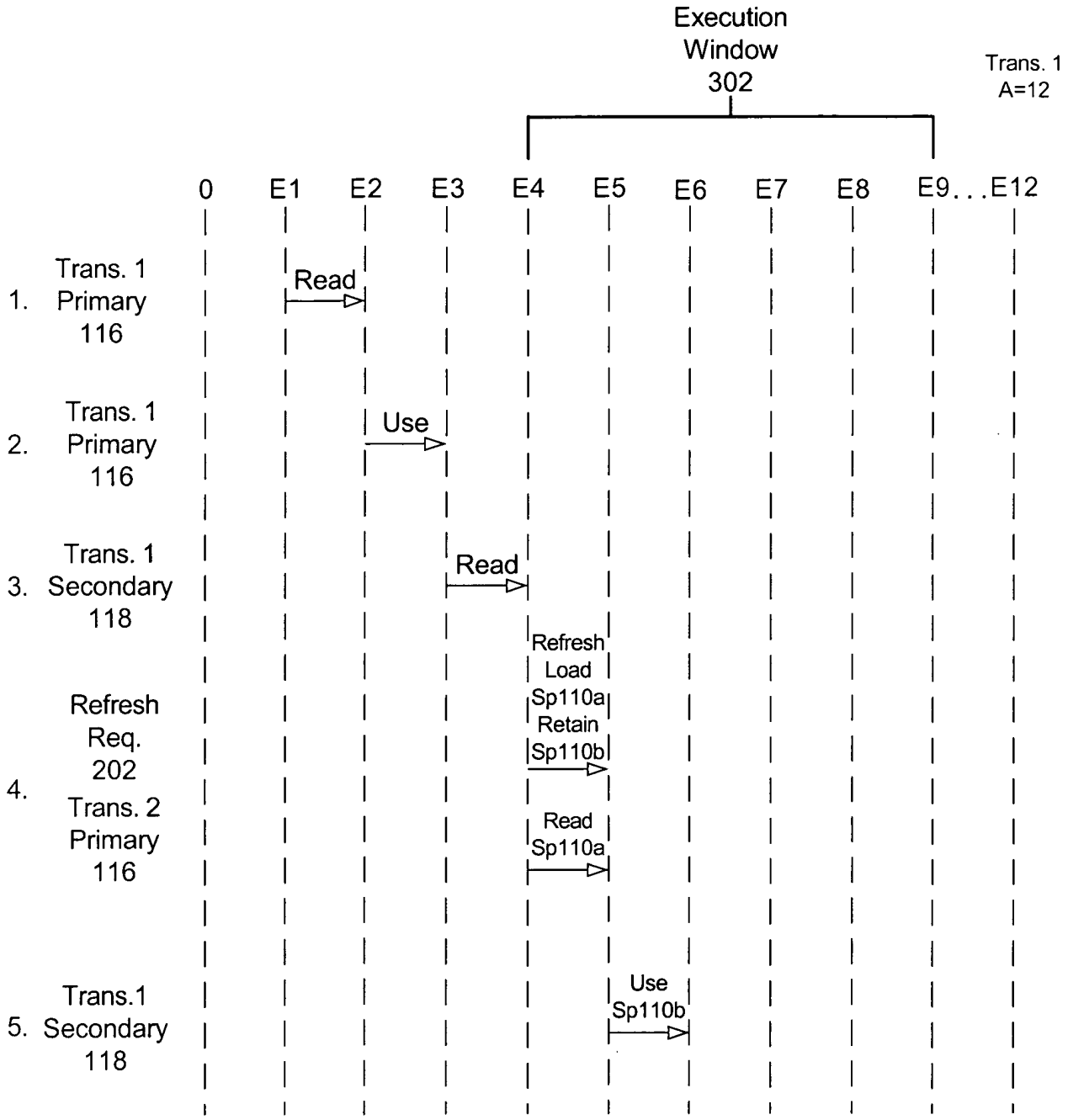
Execution Window 302
Trans. 1 A=12
0
E1
E2
E3
E4
E5
E6
E7
E8
E9...E12
Trans. 1 Primary 116
1.
Read
Trans. 1 Primary 116
2.
Use
Trans. 1 Secondary 118
3.
Read
Refresh Load Sp110a
Retain Sp110b
Refresh Req. 202
4.
Trans. 2 Primary 116
Read Sp110a
Trans.1 Secondary 118
5.
Use Sp110b

Fig. 3

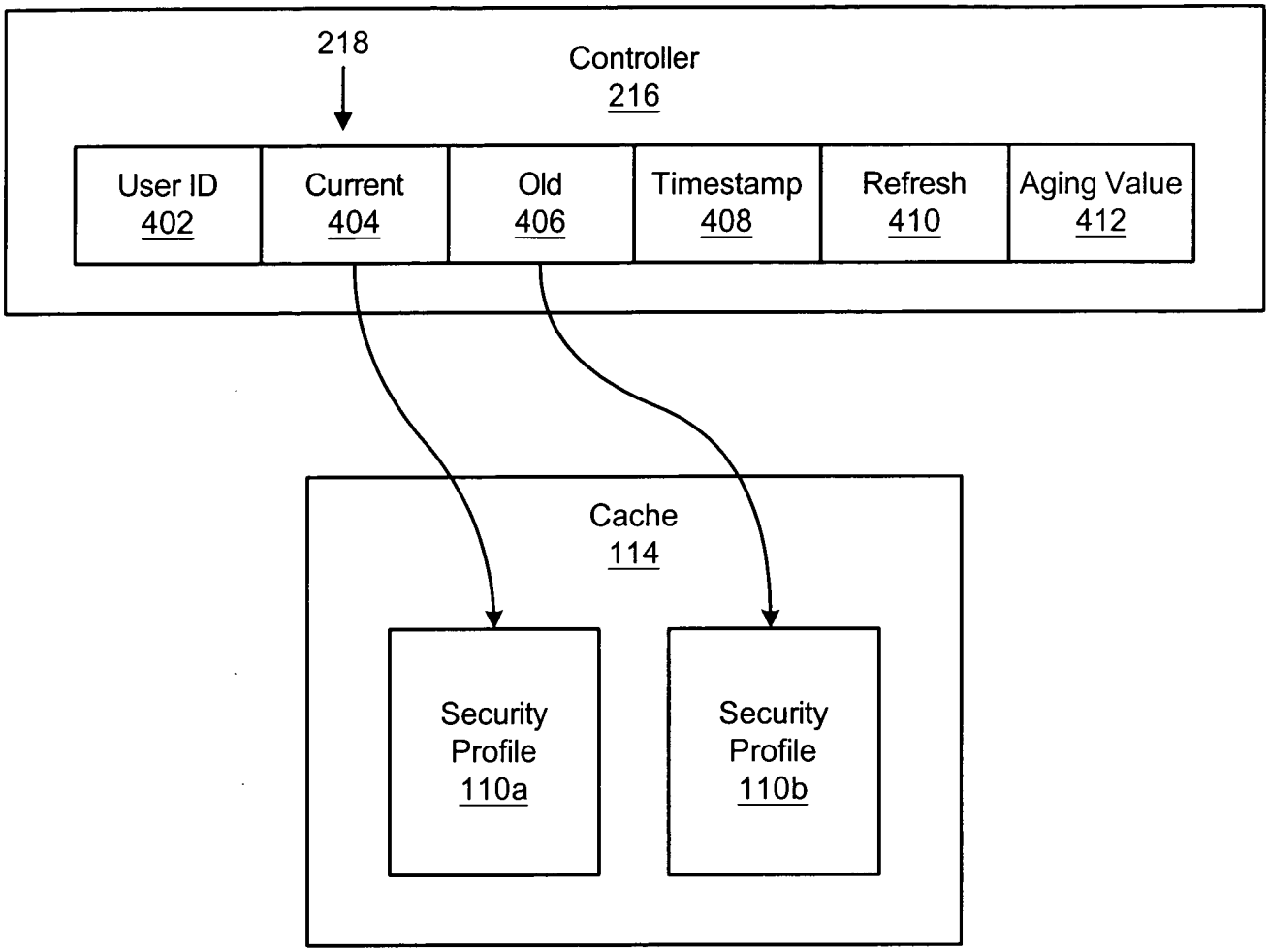
218
Controller
216
User ID
402
Current
404
Old
406
Timestamp
408
Refresh
410
Aging Value
412
Cache
114
Security
Profile
110a
Security
Profile
110b

Fig. 4

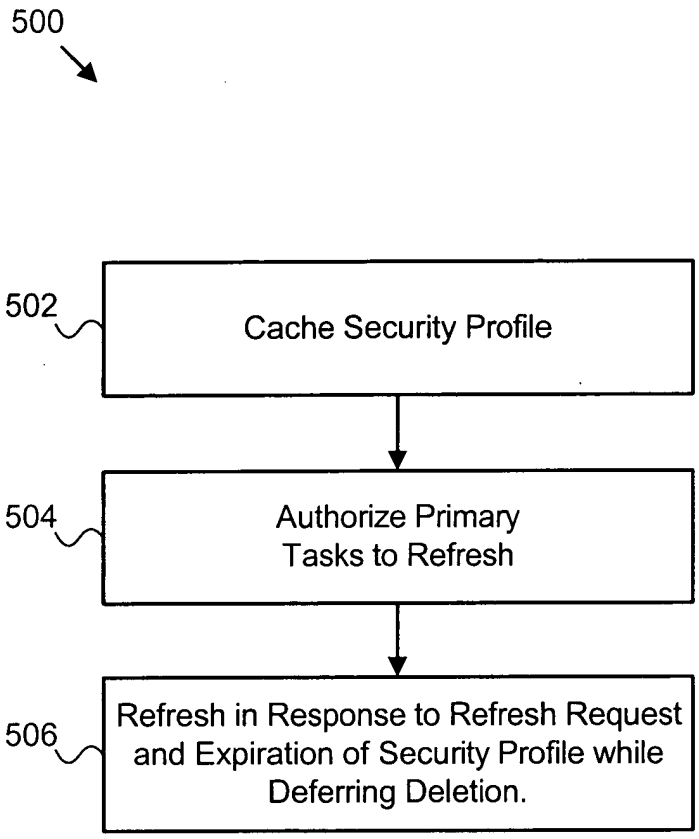
500
502
Cache Security Profile
504
Authorize Primary Tasks to Refresh
506
Refresh in Response to Refresh Request and Expiration of Security Profile while Deferring Deletion.

Fig. 5A

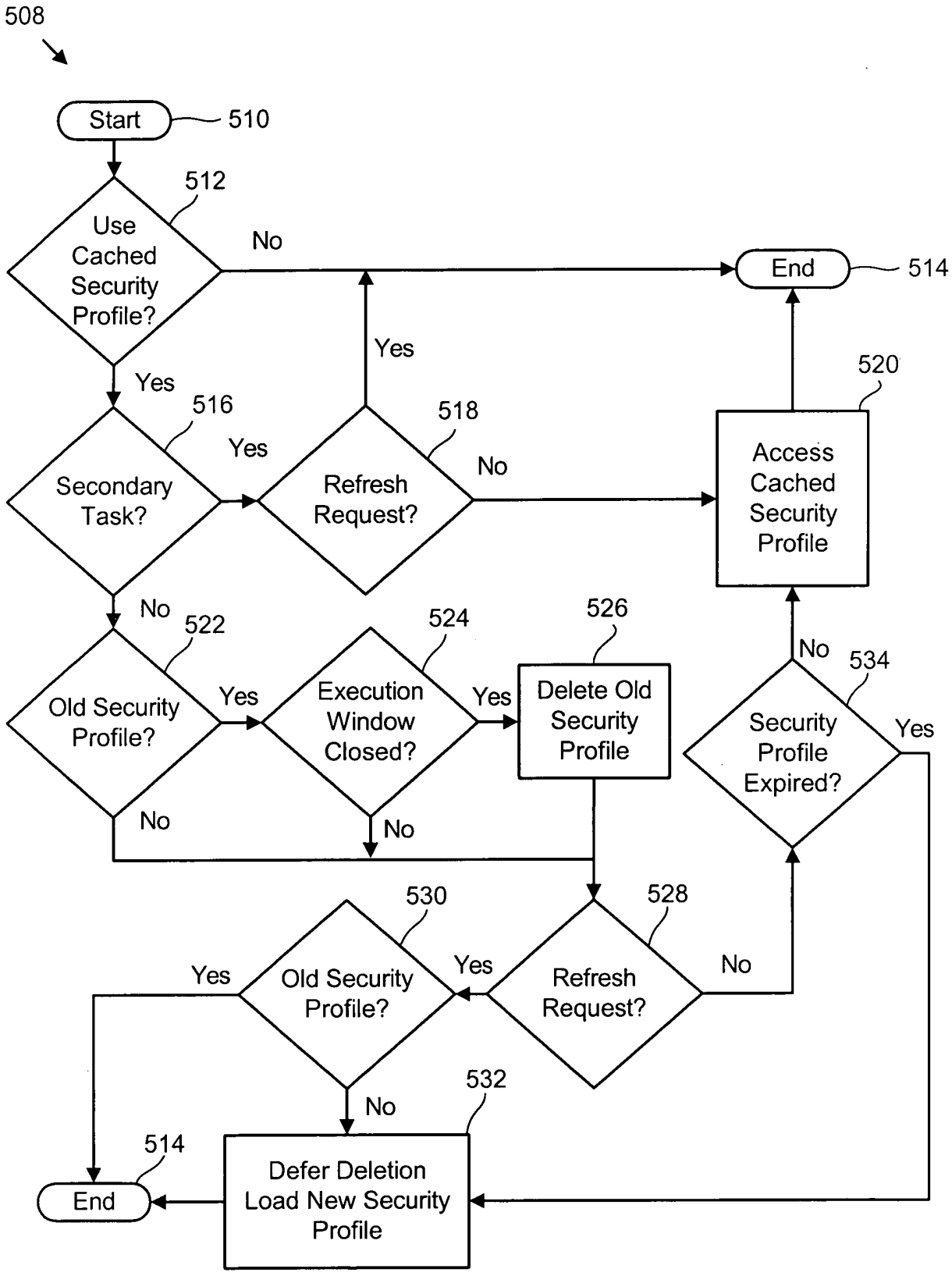
508
Start
510
512
Use Cached Security Profile?
No
End
514
Yes
Yes
516
Secondary Task?
Yes
518
Refresh Request?
Yes
No
520
Access Cached Security Profile
No
522
Old Security Profile?
Yes
524
Execution Window Closed?
Yes
526
Delete Old Security Profile
No
534
Security Profile Expired?
Yes
No
No
530
Old Security Profile?
Yes
Yes
528
Refresh Request?
No
No
532
Defer Deletion Load New Security Profile
514
End

Fig. 5B

600

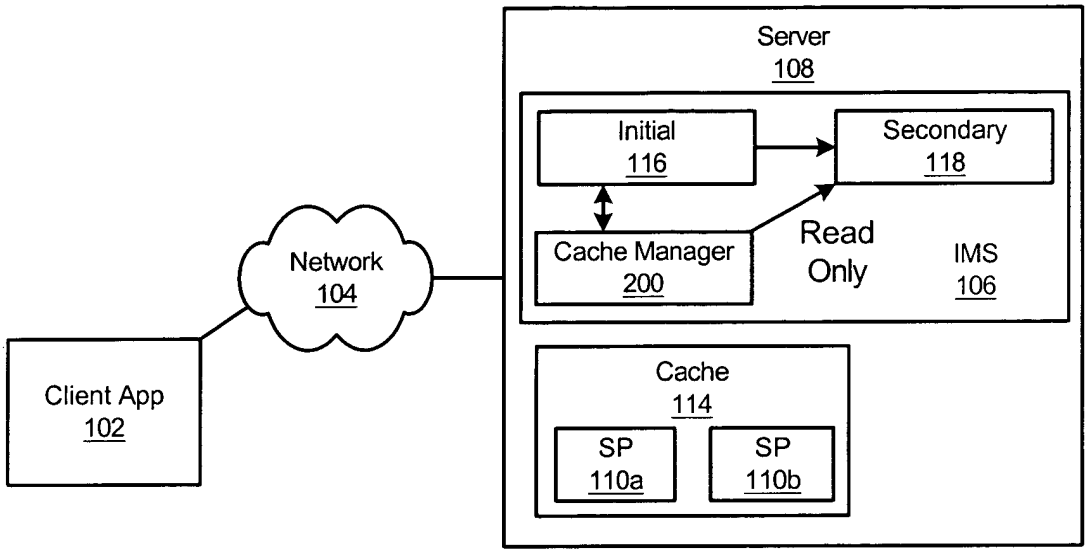
Server
108
Initial
116
Secondary
118
Cache Manager
200
Read
Only
IMS
106
Network
104
Client App
102
Cache
114
SP
110a
SP
110b

Fig. 6